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REMARKS

This Amendment is in response to the Office Action mailed on August 16, 2004. In the Office Action, claims 1-24 were rejected. With this response, claim 9 is amended. All remaining claims are unchanged.

In section three of the Office Action, claims 1-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sproat et al. ("A Stochastic Finite-State Word-Segmentation Algorithm for Chinese," *Computational Linguistics*, vol. 22:3. September 1996) in view of Kanevsky et al. (U.S. Patent No. 5,835,888).

On page three of the Office Action, the Examiner finds that "Sproat et al. does not disclose: identifying an alternative sequence of characters for at least one of the possible segments, the alternative sequence of characters forming an alternative segment that fills the same space as one of the possible segments." The Examiner further states, however, that Kanevsky et al. teaches alternate segments that fill the same space as one of the possible segments.

It is respectfully submitted that the cited references fail to teach or suggest "forming an alternative segment that fills the same space as one of the possible segments" as recited in independent claim 1. Kanevsky does not perform segmentation of a string of characters. Instead, Kanevsky performs a decoding operation to identify characters represented by an input speech signal. By decoding, Kanevsky determines which of all possible words are most likely given the input speech signal. As such, Kanevsky is not provided with a segment of characters taken from an input sequence of characters. Without an initial segment of characters, there is no way for Kanevsky to provide an alternative segment that fills the same space as the segment of characters.

In addition, it is respectfully submitted that the cited references fail to teach or suggest performing syntactic analyses using a possible segment and an alternative segment to produce a segmentation of an input sequence of characters as recited in independent claim 1. Sproat et al. selects a parsed string based on cost or based on length and Kanevsky et al. selects an ending corresponding to a stem based on statistical modeling. Therefore, neither Sproat et al. nor Kanevsky et al. use any form of syntactical analysis to segment text.

It is respectfully submitted that claim 1 is patentable over the cited references. Dependent claims 2-8 are also in condition for allowance by virtue of their dependency on an allowable base

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claim. However, the cited references also fail to teach or suggest all the dependent claim elements when read in their entirety. For example, the cited references do not teach or suggest "identifying orthographic variations of a possible segment" as recited in dependent claims 6-8.

In section four of the Office Action, claims 9-14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carus et al. (WO 98/08169) in view of Jacquemin et al. (U.S. Patent No. 6,101,492).

It is respectfully submitted that the cited references fail to teach or suggest taking at least two words that partially overlap in the string of characters as recited in amended claim 9. Neither Carus nor Jacquemin teach or suggest taking two words that partially overlap each other.

Carus only produces a single segmentation, not multiple segmentations. As a result, Curus does not take two words that partially overlap each other directly from the string of characters. In particular, the sliding window of Curus does not show taking two words that partially overlap each other. As noted on page 29, lines 34-36 of Curus, once a character-transition tag is changed during the sliding operation, it cannot be changed again. As a result, once a word break transition has been inserted, the word boundary is set. In order to have two words that overlap, two different word boundaries must be identified. This is not possible in Curus.

Jacquemin also does not teach taking overlapping words from a string of characters.

Thus, neither reference teaches taking two partially overlapping words in a string of characters.

Furthermore, the cited references do not teach or suggest preparing a syntax parse indicating the syntax of an entire string as recited in amended claim 9. Instead, Carus teaches segmentation by identifying punctuation and numbers and Jacquemin teaches a parse of small multiword sections, not the entire string.

It is respectfully submitted that claim 9 is patentable over the cited references. Dependent claims 10-14 are also in condition for allowance by virtue of their dependency on allowable base claim 9. However, the cited references also fail to teach or suggest the dependent claim elements when read in their entirety. For example, the cited references do not teach or suggest an orthographic variant structure that indicates orthographic variants of words as claimed in dependent claim 12.

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In section five of the Office Action, claims 15-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Carus et al. in view Jacquemin et al., further in view of Sproat et al. and further in view of Kanevsky et al.

None of the cited references teach or suggest performing a syntactic analysis using a variant of a first group of characters and a second group of characters that overlaps the first group of characters as recited in claim 15. In addition, dependent claims 16-24 are also patentable by virtue of their dependency on allowable base claim 15. However, the cited references also fail to teach or suggest all the dependent claim elements when read in their entirety. For example, the cited references do not teach or suggest identifying an orthographic variant as claimed in claims 22-24.

In light of the above remarks, claims 1-24 are in condition for allowance. Reconsideration and favorable action is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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